

FIGURE 1

gag Glu 1	cct Pro	ctg Leu	gat Asp	gac Asp 5	tat Tyr	gtg Val	aat Asn	acc Thr	cag Gln 10	ggg Gly	gct Ala	tca Ser	ctg Leu	ttc Phe 15	agt Ser	48
gtc Val	act Thr	aag Lys	aag Lys 20	cag Gln	ctg Leu	gga Gly	gca Ala	gga Gly 25	agt Ser	ata Ile	gaa Glu	gaa Glu	tgt Cys 30	gca Ala	gca Ala	96
aaa Lys	tgt Cys	gag Glu 35	gag Glu	gac Asp	gaa Glu	gaa Glu	ttc Phe 40	acc Thr	tgc Cys	agg Arg	gca Ala	ttc Phe 45	caa Gln	tat Tyr	cac His	144
agt Ser	aaa Lys 50	gag Glu	caa Gln	caa Gln	tgt Cys	gtg Val 55	ata Ile	atg Met	gct Ala	gaa Glu	aac Asn 60	agg Arg	aag Lys	tcc Ser	tcc Ser	192
ata Ile 65	atc Ile	att Ile	agg Arg	atg Met	aga Arg 70	gat Asp	gta Val	gtt Val	tta Leu	ttt Phe 75	gaa Glu	aag Lys	aaa Lys	gtg Val	tat Tyr 80	240
ctc Leu	tca Ser	gag Glu	tgc Cys	aag Lys 85	act Thr	ggg Gly	aat Asn	gga Gly	aag Lys 90	aac Asn	tac Tyr	aga Arg	ggg Gly	acg Thr 95	atg Met	288
tcc Ser	aaa Lys	aca Thr	aaa Lys 100	aat Asn	ggc Gly	atc Ile	acc Thr	tgt Cys 105	caa Gln	aaa Lys	tgg Trp	agt Ser	tcc Ser 110	act Thr	tct Ser	336
ccc Pro	cac His	aga Arg 115	cct Pro	aga Arg	ttc Phe	tca Ser	cct Pro 120	gct Ala	aca Thr	cac His	ccc Pro	tca Ser 125	gag Glu	gga Gly	ctg Leu	384
gag Glu	gag Glu 130	aac Asn	tac Tyr	tgc Cys	agg Arg	aat Asn 135	cca Pro	gac Asp	aac Asn	gat Asp	ccg Pro 140	cag Gln	ggg Gly	ccc Pro	tgg Trp	432
tgc Cys 145	tat Tyr	act Thr	act Thr	gat Asp	cca Pro 150	gaa Glu	aag Lys	aga Arg	tat Tyr	gac Asp 155	tac Tyr	tgc Cys	gac Asp	att Ile	ctt Leu 160	480
gag Glu	tgt Cys	gaa Glu	gag Glu	gaa Glu 165	tgt Cys	atg Met	cat His	tgc Cys	agt Ser 170	gga Gly	gaa Glu	aac Asn	tat Tyr	gac Asp 175	ggc Gly	528
aaa Lys	att Ile	tcc Ser	aag Lys 180	acc Thr	atg Met	tct Ser	gga Gly	ctg Leu 185	gaa Glu	tgc Cys	cag Gln	gcc Ala	tgg Trp 190	gac Asp	tct Ser	576
cag Gln	agc Ser	cca Pro 195	cac His	gct Ala	cat His	gga Gly	tac Tyr 200	att Ile	cct Pro	tcc Ser	aaa Lys	ttt Phe 205	cca Pro	aac Asn	aag Lys	624

FIGURE 1 continued

aac Asn	ctg Leu 210	aag Lys	aag Lys	aat Asn	tac Tyr	tgt Cys 215	cgt Arg	aac Asn	ccc Pro	gat Asp	agg Arg 220	gag Glu	ctg Leu	cgg Arg	cct Pro	672
tgg Trp 225	tgt Cys	ttc Phe	acc Thr	acc Thr	gac Asp 230	ccc Pro	aac Asn	aag Lys	cgc Arg	tgg Trp 235	gaa Glu	ctt Leu	tgc Cys	gac Asp	atc Ile 240	720
ccc Pro	cgc Arg	tgc Cys	aca Thr	aca Thr 245	cct Pro	cca Pro	cca Pro	tct Ser	tct Ser 250	ggt Gly	ccc Pro	acc Thr	tac Tyr	cag Gln 255	tgt Cys	768
ctg Leu	aag Lys	gga Gly	aca Thr 260	ggt Gly	gaa Glu	aac Asn	tat Tyr	cgc Arg 265	ggg Gly	aat Asn	gtg Val	gct Ala	gtt Val 270	acc Thr	gtt Val	816
tcc Ser	ggg Gly	cac His 275	acc Thr	tgt Cys	cag Gln	cac His	tgg Trp 280	agt Ser	gca Ala	cag Gln	acc Thr	cct Pro 285	cac His	aca Thr	cat His	864
aac Asn	agg Arg 290	aca Thr	cca Pro	gaa Glu	aac Asn	ttc Phe 295	ccc Pro	tgc Cys	aaa Lys	aat Asn	ttg Leu 300	gat Asp	gaa Glu	aac Asn	tac Tyr	912
tgc Cys 305	cgc Arg	aat Asn	cct Pro	gac Asp	gga Gly 310	aaa Lys	agg Arg	gcc Ala	cca Pro	tgg Trp 315	tgc Cys	cat His	aca Thr	acc Thr	aac Asn 320	960
agc Ser	caa Gln	gtg Val	cgg Arg	tgg Trp 325	gag Glu	tac Tyr	tgt Cys	aag Lys	ata Ile 330	ccg Pro	tcc Ser	tgt Cys	gac Asp	tcc Ser 335	tcc Ser	1008
cca Pro	gta Val	tcc Ser	acg Thr 340	gaa Glu	caa Gln	ttg Leu	gct Ala	ccc Pro 345	aca Thr	gca Ala	cca Pro	cct Pro	gag Glu 350	cta Leu	acc Thr	1056
cct Pro	gtg Val	gtc Val 355	cag Gln	gac Asp	tgc Cys	tac Tyr	cat His 360	ggt Gly	gat Asp	gga Gly	cag Gln	agc Ser 365	tac Tyr	cga Arg	ggc Gly	1104
aca Thr 370	tcc Ser	tcc Ser	acc Thr	acc Thr	acc Thr	aca Thr 375	gga Gly	aag Lys	aag Lys	tgt Cys	cag Gln 380	tct Ser	tgg Trp	tca Ser	tct Ser	1152
atg Met 385	aca Thr	cca Pro	cac His	cgg Arg	cac His 390	cag Gln	aag Lys	acc Thr	cca Pro	gaa Glu 395	aac Asn	tac Tyr	cca Pro	aat Asn	gct Ala 400	1200
ggc Gly	ctg Leu	aca Thr	atg Met	aac Asn 405	tac Tyr	tgc Cys	agg Arg	aat Asn	cca Pro 410	gat Asp	gcc Ala	gat Asp	aaa Lys	ggc Gly 415	ccc Pro	1248
tgg Trp	tgt Cys	ttt Phe	acc Thr 420	aca Thr	gac Asp	ccc Pro	agc Ser	gtc Val 425	agg Arg	tgg Trp	gag Glu	tac Tyr	tgc Cys 430	aac Asn	ctg Leu	1296

FIGURE 1 continued

aaa Lys	aaa Lys	tgc Cys 435	tca Ser	gga Gly	aca Thr	gaa Glu	gcg Ala 440	agt Ser	gtt Val	gta Val	gca Ala	cct Pro 445	ccg Pro	cct Pro	gtt Val	1344
gtc Val	ctg Leu 450	ctt Leu	cca Pro	gat Asp	gta Val	gag Glu 455	act Thr	cct Pro	tcc Ser	gaa Glu	gaa Glu 460	gac Asp	tgt Cys	atg Met	ttt Phe	1392
ggg Gly 465	aat Asn	ggg Gly	aaa Lys	gga Gly	tac Tyr 470	cga Arg	ggc Gly	aag Lys	agg Arg	gcg Ala 475	acc Thr	act Thr	gtt Val	act Thr	ggg Gly 480	1440
acg Thr	cca Pro	tgc Cys	cag Gln	gac Asp 485	tgg Trp	gct Ala	gcc Ala	cag Gln	gag Glu 490	ccc Pro	cat His	aga Arg	cac His	agc Ser 495	att Ile	1488
ttc Phe	act Thr	cca Pro	gag Glu 500	aca Thr	aat Asn	cca Pro	cgg Arg	gcg Ala 505	ggg Gly	ctg Leu	gaa Glu	aaa Lys	aat Asn 510	tac Tyr	tgc Cys	1536
cgt Arg	aac Asn	cct Pro 515	gat Asp	ggg Gly	gat Asp	gta Val	ggg Gly 520	ggg Gly	ccc Pro	tgg Trp	tgc Cys	tac Tyr 525	acg Thr	aca Thr	aat Asn	1584
cca Pro	aga Arg 530	aaa Lys	ctt Leu	tac Tyr	gac Asp	tac Tyr 535	tgt Cys	gat Asp	gtc Val	cct Pro	cag Gln 540	tgt Cys	gcg Ala	gcc Ala	cct Pro	1632
tca Ser 545	ttt Phe	gat Asp	tgt Cys	ggg Gly	aag Lys 550	cct Pro	caa Gln	gtg Val	gag Glu	ccg Pro 555	aag Lys	aaa Lys	tgt Cys	cct Pro	gga Gly 560	1680
agg Arg	gtt Val	gtg Val	ggg Gly	ggg Gly 565	tgt Cys	gtg Val	gcc Ala	cac His	cca Pro 570	cat His	tcc Ser	tgg Trp	ccc Pro	tgg Trp 575	caa Gln	1728
gtc Val	agt Ser	ctt Leu	aga Arg 580	aca Thr	agg Arg	ttt Phe	gga Gly	atg Met 585	cac His	ttc Phe	tgt Cys	gga Gly	ggc Gly 590	acc Thr	ttg Leu	1776
ala Ile	tcc Ser	cca Pro 595	gag Glu	tgg Trp	gtg Val	ttg Leu	act Thr 600	gct Ala	gcc Ala	cac His	tgc Cys	ttg Leu 605	gag Glu	aag Lys	tcc Ser	1824
cca Pro	agg Arg 610	cct Pro	tca Ser	tcc Ser	tac Tyr	aag Lys 615	gtc Val	atc Ile	ctg Leu	ggg Gly	gca Ala 620	cac His	caa Gln	gaa Glu	gtg Val	1872
aat Asn 625	ctc Leu	gaa Glu	ccg Pro	cat His	gtt Val 630	cag Gln	gaa Glu	ata Ile	gaa Glu	gtg Val 635	tct Ser	agg Arg	ctg Leu	ttc Phe	ttg Leu 640	1920
gag Glu	ccc Pro	aca Thr	cga Arg	aaa Lys 645	gat Asp	att Ile	gcc Ala	ttg Leu	cta Leu 650	aag Lys	cta Leu	agc Ser	agt Ser	cct Pro 655	gcc Ala	1968

**FIGURE 1 continued**

[illegible]

**FIGURE 2**

														gcc Ala	cct Pro	1632
tca Ser 545	ttt Phe	gat Asp	tgt Cys	ggg Gly	aag Lys 550	cct Pro	caa Gln	gtg Val	gag Glu	ccg Pro 555	aag Lys	aaa Lys	tgt Cys	cct Pro	gga Gly 560	1680
agg Arg	gtt Val	gtg Val	ggg Gly	ggg Gly 565	tgt Cys	gtg Val	gcc Ala	cac His	cca Pro 570	cat His	tcc Ser	tgg Trp	ccc Pro	tgg Trp 575	caa Gln	1728
gtc Val	agt Ser	ctt Leu	aga Arg 580	aca Thr	agg Arg	ttt Phe	gga Gly	atg Met 585	cac His	ttc Phe	tgt Cys	gga Gly	ggc Gly 590	acc Thr	ttg Leu	1776
ata Ile	tcc Ser	cca Pro 595	gag Glu	tgg Trp	gtg Val	ttg Leu	act Thr 600	gct Ala	gcc Ala	cac His	tgc Cys	ttg Leu 605	gag Glu	aag Lys	tcc Ser	1824
cca Pro	agg Arg 610	cct Pro	tca Ser	tcc Ser	tac Tyr	aag Lys 615	gtc Val	atc Ile	ctg Leu	ggc Gly	gca Ala 620	cac His	caa Gln	gaa Glu	gtg Val	1872
aat Asn 625	ctc Leu	gaa Glu	ccg Pro	cat His	gtt Val 630	cag Gln	gaa Glu	ata Ile	gaa Glu	gtg Val 635	tct Ser	agg Arg	ctg Leu	ttc Phe	ttg Leu 640	1920
gag Glu	ccc Pro	aca Thr	cga Arg	aaa Lys 645	gat Asp	att Ile	gcc Ala	ttg Leu	cta Leu 650	aag Lys	cta Leu	agc Ser	agt Ser	cct Pro 655	gcc Ala	1968
gtc Val	atc Ile	act Thr	gac Asp 660	aaa Lys	gta Val	atc Ile	cca Pro	gct Ala 665	tgt Cys	ctg Leu	cca Pro	tcc Ser	cca Pro 670	aat Asn	tat Tyr	2016
gtg Val	gtc Val	gct Ala 675	gac Asp	cgg Arg	acc Thr	gaa Glu	tgt Cys 680	ttc Phe	atc Ile	act Thr	ggc Gly	tgg Trp 685	gga Gly	gaa Glu	acc Thr	2064
caa Gln	ggc Gly 690	act Thr	ttt Phe	gga Gly	gct Ala	ggc Gly 695	ctt Leu	ctc Leu	aag Lys	gaa Glu	gcc Ala 700	cag Gln	ctc Leu	cct Pro	gtg Val	2112
att Ile 705	gag Glu	aat Asn	aaa Lys	gtg Val	tgc Cys 710	aat Asn	cgc Arg	tat Tyr	gag Glu	ttt Phe 715	ctg Leu	aat Asn	gga Gly	aga Arg	gtc Val 720	2160
caa Gln	tcc Ser	acc Thr	gaa Glu	ctc Leu 725	tgt Cys	gct Ala	ggg Gly	cat His	ttg Leu 730	gcc Ala	gga Gly	ggc Gly	act Thr	gac Asp 735	agt Ser	2208

**FIGURE 2 continued**

[illegible]

FIGURE 3

											gca Ala	cct Pro 445	ccg Pro	cct Pro	gtt Val	1344
gtc Val	ctg Leu 450	ctt Leu	cca Pro	gat Asp	gta Val	gag Glu 455	act Thr	cct Pro	tcc Ser	gaa Glu	gaa Glu 460	gac Asp	tgt Cys	atg Met	ttt Phe	1392
ggg Gly 465	aat Asn	ggg Gly	aaa Lys	gga Gly	tac Tyr 470	cga Arg	ggc Gly	aag Lys	agg Arg	gcg Ala 475	acc Thr	act Thr	gtt Val	act Thr	ggg Gly 480	1440
acg Thr	cca Pro	tgc Cys	cag Gln	gac Asp 485	tgg Trp	gct Ala	gcc Ala	cag Gln	gag Glu 490	ccc Pro	cat His	aga Arg	cac His	agc Ser 495	att Ile	1488
ttc Phe	act Thr	cca Pro	gag Glu 500	aca Thr	aat Asn	cca Pro	cgg Arg	gcg Ala 505	ggg Gly	ctg Leu	gaa Glu	aaa Lys	aat Asn 510	tac Tyr	tgc Cys	1536
cgt Arg	aac Asn	cct Pro 515	gat Asp	ggg Gly	gat Asp	gta Val	ggg Gly 520	ggg Gly	ccc Pro	tgg Trp	tgc Cys	tac Tyr 525	acg Thr	aca Thr	aat Asn	1584
cca Pro	aga Arg 530	aaa Lys	ctt Leu	tac Tyr	gac Asp	tac Tyr 535	tgt Cys	gat Asp	gtc Val	cct Pro	cag Gln 540	tgt Cys	gcg Ala	gcc Ala	cct Pro	1632
tca Ser 545	ttt Phe	gat Asp	tgt Cys	ggg Gly	aag Lys 550	cct Pro	caa Gln	gtg Val	gag Glu	ccg Pro 555	aag Lys	aaa Lys	tgt Cys	cct Pro	gga Gly 560	1680
agg Arg	gtt Val	gtg Val	ggg Gly	ggg Gly 565	tgt Cys	gtg Val	gcc Ala	cac His	cca Pro 570	cat His	tcc Ser	tgg Trp	ccc Pro	tgg Trp 575	caa Gln	1728
gtc Val	agt Ser	ctt Leu	aga Arg 580	aca Thr	agg Arg	ttt Phe	gga Gly	atg Met 585	cac His	ttc Phe	tgt Cys	gga Gly	ggc Gly 590	acc Thr	ttg Leu	1776
ata Ile	tcc Ser	cca Pro 595	gag Glu	tgg Trp	gtg Val	ttg Leu	act Thr 600	gct Ala	gcc Ala	cac His	tgc Cys	ttg Leu 605	gag Glu	aag Lys	tcc Ser	1824
cca Pro	agg Arg 610	cct Pro	tca Ser	tcc Ser	tac Tyr	aag Lys 615	gtc Val	atc Ile	ctg Leu	ggg Gly	gca Ala 620	cac His	caa Gln	gaa Glu	gtg Val	1872
aat Asn 625	ctc Leu	gaa Glu	ccg Pro	cat His	gtt Val 630	cag Gln	gaa Glu	ata Ile	gaa Glu	gtg Val 635	tct Ser	agg Arg	ctg Leu	ttc Phe	ttg Leu 640	1920

**FIGURE 3 continued**

[illegible]